## ClassMarker

## Primary 4 - Term 2 (SA1) Science (Nan Ha)



## Test Introduction

+ Add Introduction

51 Questions (67 Points)

Test Questions 1 Test Assignment

## Question 1

Booklet A (28 x 2 marks $\}$
For each question from 1 to 28 , four options are given. One of them is the correct answer.

## Which of the following are sources of lIght?


book

sun

fire

clock
A) fire and sun only
B) book and sun only
C) clock and fire only
D) clock and sun only

Question Type:
Randomize Answers:
: No
Last Modified: N/A
GID\#: $\quad 24,118,282$

$\imath^{*}$ Answers


What will happen to the shadow if the torch is moved nearer to the object?
A) The shadow will disappear
(B) The shadow will become bigger
C) The shadow will become smaller
D) The shadow will remain the same

Question Type: Multiple Choice
Randomize Answers: No
Date Added: Wed 7th Oct 2020
Last Modified: N/A
QID\#: $\quad 24,118,291$

## $*^{n}$ Answers | Edit | ED Duplicate | 1 Used In | $\hat{\nabla}$ Reorder

## Question 3

## Study the diagram below.


A) The tree reflected light
B) The tree absorbed light
C) The light passed through the tree
(D) The path of light is blocked by the tree

Randomize Answers: No

| Date Added: | Wed 7th Oct 2020 |
| :--- | :--- |
| Last Modified: | N/A |
| QID\#: | $24,118,440$ |



## Question 4

Which one of the following is a matter?
A)
?

shadow formed by hands
B)

sound from a man
$\checkmark$ C)

wind from a fan

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Wed 7th Oct 2020 |
| Last Modified: | N/A |
| QID\#: | $24,118,473$ |

Question 5

The table below shows the properties of three matter.

| Matter | Definite volume | Definite shape | Can be compressed |
| :---: | :---: | :---: | :---: |
| A | No | No | Yes |
| B | Yes | No | No |
| C | Yes | Yes | No |

Which one of the following matter has properties of a soldd?
A) A
B) $B$
C) C
D) None of the above

## Question Type:

Randomize Answers: No
Date Added: Wed 7th Oct 2020
Last Modified:

N/A
24,118,491

## Question 6

Which one of the following is not a source of heat?
(A)


Stapler
B)


Toaster
C)


## Campfire

D)


## Hair dryer

Question Type: Multiple Choice<br>Randomize Answers: No<br>Date Added: Wed 7th Oct 2020<br>Last Modified: N/A<br>QID\#:<br>24,118,515

Ted wanted to remove the metal cover that was fitted tighty to the glass container. Using just a basin of hot water, which of the following arrangement would allow Ted to easily remove the metal cover?

A) 1
B) 2
C) 3
D) 4

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Wed 7th Oct 2020 |
| Last Modified: | N/A |
| QID\#: | $24,118,526$ |



The diagram below shows a cooking pot with hot potatoes in it.


What properties of the materials are suitable for making part E and part F of the cooking pot?
(1)
(2)
(3)
(4)

| Part $E$ | - Part $F$ |
| :---: | :---: |
| good conductor of heat | good conductor of heat |
| poor conductor of heat | good conductor of heat |
| good conductor of heat | poor conductor of heat |
| poor conductor of heat | poor conductor of heat |

A) 1
B) 2
C) 3
D) 4

## Question Type:

Multiple Choice
Randomize Answers:
Date Added:
Last Modified:
QID\#:

No
Wed 7th Oct 2020
N/A
24,118,536

## $\mathbf{k}^{x}$ Answers Edit | Duplicate | $\mathbb{4}$ Used In $\mid \stackrel{\rightharpoonup}{*}$ Reorder

## Question 9

The windshield of a car allows the driver to see the road ahead clearly when driving under any conditions.


What properties of the windshield allow the driver to drive on rainy days?
A) strong and flexible
B) strong and translucent
C) waterproof and flexible
D) waterproof and transparent

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Wed 7th Oct 2020 |
| Last Modified: | N/A |
| QID\#: | $24,118,557$ |

```
* Answers | Edit & Duplicate| \ Used In | 人े Reorder
```

Question 10

Which one of the following statements about magnets is true?
A) The magnetic strength of a magnet is strongest in the middle
B) A temporary magnet can only be formed by the electrical method
C) Magnets will lose their magnetism when heated over a strong flame
D) A freely suspended bar magnet will come to rest in the East-West direction

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Wed 7th Oct 2020 |
| Last Modified: | N/A |
| QID\#: | $24,118,586$ |



Danny set up an experiment as shown below. He had four different objects and wanted to find out which object when placed in front of toy car $P$ would not be able to prevent the balloon from bursting. After attaching the object in front of toy car $P$, he released it at the same position and observed what happened.
$\stackrel{\rightharpoonup}{*}$


The objects were:

|  | Object |
| :---: | :---: |
| A | Magnet |
| B | Steel |
| C | Plastic |
| D | Rubber |

Which of the four objects above would not be able to prevent the balloon from
bursting?
A) A only
B) A and B only
C) C and D only
D) B, C and D only

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Wed 7th Oct 2020 |
| Last Modified: | N/A |
| QID\#: | $24,118,599$ |

[^0]Question 12

## Study the set-up below.



Objects $\mathrm{X}, \mathrm{Y}$ and Z were placed in between the light source and the screen one at a time.




The following shadows were formed on the acreen.


Based on the observations above, which of the following statements are correct?

A Object $X$ blocked the most light.
日 Object $Y$ allowed most light to pass through.
C Object $Z$ did not allow any light to pass through.
D The path of light was blocked by at least one of the objects.
A) A and C only
B) A and D only
C) B and D only
(D) C and D only

## Question Type:

Multiple Choice
Randomize Answers: No
Date Added: Wed 7th Oct 2020
Last Modified: N/A
QID\#: $\quad 24,118,628$
$\mathbf{*}^{\wedge}$ Answers | Edit | Con Duplicate | 4 Used $\ln \mid \stackrel{\rightharpoonup}{\boldsymbol{*}}$ Reorder

## Annie used a torch to shine on an object. She discovered that the object could cast both the shadowa shown below.



Which of the following was the object which Annie had shone the torch on?

## (1)


(3)

(2)

(4)

A) 1
B) 2
C) 3
D) 4

## Question Type:

Multiple Choice
Randomize Answers: No
Date Added: Wed 7th Oct 2020
Last Modified:
QID\#:
N/A
24,118,633


Question 14

Arthur placed object S in a beaker that was filled with 120 ml of water and the water level rose to 200 ml .

beaker without object S
beaker with object S
He took out object S and cut it into two halves. He then placed the two halves back into the beaker with 120 ml of water.


What is the reading of the water level when two halves of object S are placed into the beaker?
A) 80 ml
B) 120 ml
C) 200 ml
D) 320 ml

Question Type:
Randomize Answers:
Date Added:
Last Modified:
QID\#:

Multiple Choice
No
Wed 7th Oct 2020
N/A
24,118,664

Study the diagram below.


Which of the following statements about objects $\overline{\mathrm{A}}$ and B are correct?
A Both objects have different mass.
B Both objects have the same mass.
C Both objects have different volume.
D Both objects have the same volume.
A) A and B only
B) A and D only
(C) B and C only
D) B and D only

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Wed 7th Oct 2020 |
| Last Modified: | N/A |
| QID\#: | $24,118,680$ |



Question 16

Ben poured $80 \mathrm{~cm}^{3}$ of water into a container as shown in the diagram below.


He then poured $60 \mathrm{~cm}^{2}$ of sand into the container.


Why was the water level below $140 \mathrm{~cm}^{3}$ ?
A) The sand can be compressed
B) The water can be compressed
C) The air trapped between the sand particles was compressed
$\checkmark$ D) Some water occupied the air spaces in between the sand particles

## Question Type:

Multiple Choice
Randomize Answers: No
Date Added: Wed 7th Oct 2020
Last Modified:
QID\#:
N/A
24,118,704

The diagram below shows a metal block.


What happened to the metal block after it was heated?

| (1) | Shape | Mass |
| :---: | :---: | :---: |
| Changed | Same | Volume |
| (2) | Same | Increased |
| (2) | Increased |  |
| (3) | Same | Decreased |
| (4) | Decreased |  |

A) 1
B) 2
C) 3
(D) 4

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Wed 7th Oct 2020 |
| Last Modified: | N/A |
| QID\#: | $24,118,713$ |

[^1]Question 18

During a science fair, an experiment was set up as shown below.


Four students came along and made the following comments:

| Student | Comments |
| :---: | :--- |
| Ashton | The water in both beakers will eventually reach <br> room temperature. |
| Berinda | The water in beaker A has more heat than the <br> water in beaker B. |
| Caili | Temperature of water in beaker B will decrease <br> faster than that in beaker A. |
| David | Since the water in both beakers have the same <br> temperature, they have the same amount of heat. |

Which of the comments made is/are true?
A) Ashton only
B) Ashton and David only
C) Berinda and Calli only
(D) Ashton, Berinda and Calli only

Question Type:
Randomize Answers:
No
Date Added: Wed 7th Oct 2020
Last Modified: N/A
QID\#: $\quad 24,118,736$

## $\mathbf{k}^{\wedge}$ Answers | Edit | Duplicate | 1 Used In | 令 Reorder

Question 19

Two containers, A and B , were immersed into a basin of hot water at $90^{\circ} \mathrm{C}$ as shown in the diagram below.


If the whole set-up was placed in a room at a temperature of $23^{\circ} \mathrm{C}$ for 9 hours, which of the following correctly shows the temperature of the water found in the two containers and the basin?

|  | Basin | Container A | Container B |
| :---: | :---: | :---: | :---: |
| $(1)$ | $90^{\circ} \mathrm{C}$ | $50^{\circ} \mathrm{C}$ | $10^{\circ} \mathrm{C}$ |
| $(2)$ | $500^{\circ} \mathrm{C}$ | $50^{\circ} \mathrm{C}$ | $50^{\circ} \mathrm{C}$ |
| $(3)$ | $23^{\circ} \mathrm{C}$ | $23^{\circ} \mathrm{C}$ | $23^{\circ} \mathrm{C}$ |
| $(4)$ | $50^{\circ} \mathrm{C}$ | $23^{\circ} \mathrm{C}$ | $23^{\circ} \mathrm{C}$ |

A) 1
B) 2
C) 3
D) 4

Question Type:
Randomize Answers:
Date Added:
Last Modified:
QID\#:

Multiple Choice
No
Wed 7th Oct 2020
N/A
24,118,747

## $\mathbf{x}^{\wedge}$ Answers | Edit | Equplicate | 4Used In | $\hat{\boldsymbol{*}}$ Reorder

Question 20

A metal bar was formed by joining two metal strips together. After being heated for a short period of time, one metal strip expanded more than the other, causing the metal bar to bend as shown below.


In another experiment, three motal bars, 1, 2-and 3, were heated for two minutes each and the results were shown in the diagram below.


metal bar 1

metal bar 2

metal bar 3

Which one of the following correctly showed the arrangement of metals starting from the metal that expands the most to the metal that expands the least when heatod?

|  | expands most |  |  | expands least |
| :---: | :---: | :---: | :---: | :---: |
| $(1)$ | $\mathbf{R}$ | , | $\mathbf{Q}$ | , |
| $(2)$ | $\mathbf{Q}$ | , | $\mathbf{R}$ | , |
| $(3)$ | $\mathbf{P}$ | , | $\mathbf{Q}$ | , |
| $(4)$ | $\mathbf{Q}$ | , | $\mathbf{P}$ | $\mathbf{R}$ |

A) 1
B) 2
C) 3
D) 4

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Wed 7th Oct 2020 |
| Last Modified: | N/A |
| QID\#: | $24,118,763$ |

$\mathbf{x}^{\boldsymbol{n}}$ Answers | Edit | 纪Duplicate | 4 Used In | 令Reorder

A beaker of water was placed on top of three different materials, and a candle was placed below to heat the water up as shown in the diagram below.


Which of the following combination of materials would allow the beaker of water to heat up the fastest?

|  | Matorial 1 | Material 2 | Material 3 |
| :---: | :---: | :---: | :---: |
| $(1)$ | Steel | Wood | Plastic |
| $(2)$ | Iron | Steel | Wood |
| $(3)$ | Plastic | Coppet | Steel |
| $(4)$ | Copper | Steel | Iron |

A) 1
B) 2
C) 3
(D) 4

Question Type:
Randomize Answers:
Date Added:
Last Modified:
QID\#:

Multiple Choice
No
Wed 7th Oct 2020
N/A
24,118,773

Study the $\mathbf{2}$ groups of objects below.


Which one of the following are possible headings for Group $\mathbf{G}$ and Group H?

|  | Group G | Group H |
| :---: | :---: | :---: |
| A | Strong | Not Strong |
| B | Not flexible | Flexibie |
| C | Not waterproof | Waterpropf |
| D | Not transparent | Transparent |

A) A and B only
B) A and C only
C) B and D only
(D) C and D only

Question Type:
Randomize Answers:
Ran Ade Answers: No
Last Modified:
QID\#:
N/A
24,118,798

Mingwei conducted an experiment with three materials, $X, Y$ and $Z$. He added load of dfferent masses to each material as show in the diagram below.


His observations were shown in the table below.:

| Material | Did the material break when the load was added? |  |  |
| :---: | :---: | :---: | :---: |
|  | $\mathbf{5 - k g}$ | $\mathbf{1 0 - k g}$ |  |
|  | no | no | no |
| $Y$ | no | no | yes |
| $Z$ | no | yes | yes |

Which of the following statements about matenals $\mathrm{X}, \mathrm{Y}$ and Z is/are true?

| A | Material X is the strongest. |
| :---: | :--- |
| B | Material Y is weaker than material Z |
| C | Materiai Z is more flexible than material X |
| D | Material Y can support a heavier load than material Z. |

A) A only
B) B and C only
C) A and D only
D) A, C and D only

Question Type:
Randomize Answers: No
Date Added: Wed 7th Oct 2020
Last Modified: N/A
QID\#: $\quad 24,118,868$

The set-up below is made up of four rings, P, Q, R and S.
.


Based on the diagram above, which of the following could objects P, Q, R and S be?

|  | $\mathbf{P}$ | $\mathbf{Q}$ | $\mathbf{R}$ | $\mathbf{S}$ |
| :---: | :---: | :---: | :---: | :---: |
| $(1)$ | plastic ring | magnet | magnet | steel ring |
| $(2)$ | magnet | steel ring | magnet | plastic ring |
| $(3)$ | plastic ring | magnet | stoel ring | magnet |
| $(4)$ | steel ring | magnet | plastic ring | magnet |

A) 1
B) 2
C) 3
D) 4

Question Type:
Multiple Choice
Randomize Answers: No
Date Added: Wed 7th Oct 2020
Last Modified:
QID\#:
N/A
24,118,878

## n Answers $\mid$ Edit $\mid$ Duplicate $\boldsymbol{4}$ Used $\ln \mid \stackrel{\rightharpoonup}{*}$ Reorder

Question 25

Three bar magnets, $\mathrm{AB}, \mathrm{CD}$ and EF , can be arranged as shown below.

| A | B | C | D | E | F |
| :--- | :--- | :--- | :--- | :--- | :--- |

Which one of the following arrangements of the magnets is not possible?
(1)

(2)

(3)

(4)

A) 1
B) 2
C) 3
(D) 4

$$
\begin{array}{ll}
\text { Question Type: } & \text { Multiple Choice } \\
\text { Randomize Answers: } & \text { No } \\
\text { Date Added: } & \text { Wed 7th Oct } 2020 \\
\text { Last Modified: } & \text { N/A } \\
\text { QID\#: } & 24,118,891
\end{array}
$$

## Study the two pictures below.


A) Both reproduce from spores
B) Both are non-flowering plants
C) Both can make their own food
D) Both can respond to changes around them

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Wed 7th Oct 2020 |
| Last Modified: | N/A |
| QID\#: | $24,118,905$ |

$«^{\star}$ Answers | Edit R Duplicate| $\uparrow$ Used $\ln \mid \hat{\rightharpoonup}$ Reorder Remove From Test

Question 27

Study the flow chart below.


What animals could R, S and T be?
(1)

| R | S | T |
| :---: | :---: | :---: |
| Chicken | Cow | Mosquito |
| Mosquito | Cow | Chicken |
| Cow | Mosquito | Chicken |
| Mosquito | Chicken | Cow |

A) 1
(B) 2
C) 3
D) 4

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Wed 7th Oct 2020 |
| Last Modified: | N/A |
| QID\#: | $24,118,910$ |

Question 28

The pictures below show a monkey and a hamster.

A) lay eggs
B) have feelers
C) are covered with feathers
D) feed their young with milk

## Question Type:

Randomize Answers:
Date Added:
Multiple Choice

Wed 7th Oct 2020
Last Modified:
N/A
QID\#:
24,118,929

## $\mathbf{k}^{\boldsymbol{n}}$ Answers | Edit $\mid$ Duolicate | $\mathbb{1}$ Used $\ln \mid \stackrel{\rightharpoonup}{*}$ Reorder

Question 29

Booklet B
This section is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.
Grading: This question type is not graded on this system and will not affect the final score as it was designed in such a way that it requires manual assistance.

Lena set up an experiment as shown below.

(a) Without moving the screen, suggest two ways that will enable Lena to obtain a
bigger shadow of object $W$ on the screen.
(i)
$\qquad$
(ii) $\qquad$
$\qquad$
(b) Lena replacod object W with another round object made of a different material. She saw a darker shadow being formed on the screen. Why is it so?

| Date Added: | Wed 7th Oct 2020 |
| :--- | :--- |
| Last Modified: | N/A |

QID\#: 24,119,003

Correctly answered feedback
ai) Leas can move the object closer to the torch.
aii) Lena can move the torch closer to the object.
b) She saw a darker shadow as the new round object is made of a material that blocks more light.

Incorrectly answered feedback
ai) Lena can move the object closer to the torch.
aii) Lena can move the torch closer to the object.
b) She saw a darker shadow as the new round object is made of a material that blocks more light.

## * Answers | Edit | \& Duplicate | 4Used In | 合Reorder

Sam and Sue were given three balls of different sizes and masses as shown below.

polystyrene ball

metal ball

basketball

What instrument can they use to measure the masses of the balls?

Accepted answers:
electronic balance
$\checkmark$ An electronic balance

Question Type: Free Text
Date Added:
Last Modified: N/A
QID\#: 24,119,030

## 

## Question 31

Based on the diagrams above, which object has the largest volume?

Accepted answers:
basketball
The basketball

## Question Type: Free Text

Date Added: Wed 7th Oct 2020
Last Modified: N/A
QID\#: 24,119,044

## $\mathbf{k}^{\star}$ Answers | Edit | 约Duplicate | 4 Used In | $\hat{\text { veorder }}$

## Question 32

The mass of each ball is shown below.

| Object | polystyrene ball | metal ball | basketball |
| :--- | :---: | :---: | :---: |
| Mass $(\mathrm{g})$ | 350 | 1200 | 1100 |

(c) Sam concluded that the larger the volume of the ball, the larger the mass. Do you agree with Sam? Explain.

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Wed 7th Oct 2020 |
| Last Modified: | N/A |
| QID\#: | $24,119,067$ |

## Correctly answered feedback

ic) No. The volume of the ball does not determine the mass of the pall. The basketball has the largest volume but it does not have the largesf mass.

Incorrectly answered feedback
ic) No. The volume of the ball does not determine the mass of the pall. The basketball has the largest volume but it does not have the largesf mass.

## Question 33

Martha conducted an experiment using set-ups $A$ and $B$ as shown below. She wrapped the plastic milk bottle in Set-up A with aluminium foil and another identical plastic mak bottle in Set-up B with a rubber sheet. She filled both bottles with the same amount of hot milk at $60^{\circ} \mathrm{C}$.

(a) What would happen to the temperature of the milk in the bottles affer some time?
(b) Give a reason for your answer in part (a).
$\qquad$
$\qquad$
(c) Martha placed set-ups A and B in a room at $30^{\circ} \mathrm{C}$. What could be the temperature of the milk in the botties after 5 minutes? Write your answors in the table given below.

|  | Temperature of the <br> milk at the start | Temperature of the milk <br> after 5 minutes |
| :---: | :---: | :---: |
| Set-up A | $60^{\circ} \mathrm{C}$ |  |
| Set-up B | $60^{\circ} \mathrm{C}$ |  |


| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Wed 7th Oct 2020 |
| Last Modified: | N/A |
| QID\#: | $24,119,137$ |

Correctly answered feedback
a) The temperature will decrease.
b) The heat from the milk is gradually lost to its surroundings over time.
(c)

|  | Temperature of the milk at <br> the start | Temperature of the milk <br> after 5 minutes |
| :---: | :---: | :---: |
| Set-up A | $60^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| Set-up B | $60^{\circ} \mathrm{C}$ | $57^{\circ} \mathrm{C}$ |

Incorrectly answered feedback
a) The temperature will decrease.
b) The heat from the milk is gradually lost to its surroundings over
time.
4
(c)

|  | Temperature of the milk at <br> the start | Temperature of the milk <br> after 5 minutes |
| :---: | :---: | :---: |
| Set-up A | $60^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| Set-up B | $60^{\circ} \mathrm{C}$ | $57^{\circ} \mathrm{C}$ |

When Jenny brought a piece of bar magnet near a box of iron nails, it attracted some naila to it as shown in the diagram below.


What can she do to enable the same magnet to attract more iron nalls? "[1]
$\qquad$

Question Type: Essay

| Date Added: | Wed 7th Oct 2020 |
| :--- | :--- |
| Last Modified: | N/A |

Correctly answered feedback
She can use a stronger magnet to stroke the magnet shown in the diagram below

Incorrectly answered feedback
She can use a stronger magnet to stroke the magnet shown in the diagram below

## $\star^{\wedge}$ Answers | Edit | EDDuplicate | 4 Used In | 合 Reorder

## Question 35

Match the options below:

Jenny accidentally dropped the piece of magnet and it was broken into four parts labelled $\mathrm{W}, \mathrm{X}, \mathrm{Y}$ and Z as shown in the diagram below.


Label the poles of the parts of the broken magnet in the boxes provided above.

Points: + 1 - 0

Part Z

Points: +1 - 0

Question Type: Matching
Shuffle Mode: Shuffle Matches Only
Date Added: Wed 7th Oct 2020
Last Modified: N/A
QID\#: 24,119,173

## Question 36

Leo conducted an experiment to measure the amount of light that can pass through five different materials. The results are shown in the bar chart below.

-
Based on the results given in the bar chart above, arrange the materials in order starting from the one that allows the most light to pass through.
[2]


Accepted answers:
D,C,A,B,E
D, C, A, B, E
D, C, A, B, E
DCABE

Question Type: Free Text
Date Added: Wed 7th Oct 2020
Last Modified: N/A
QID\#:
24,119,218

Leo wants to choose a material for making a door for the public toilet to ensure privacy. Which material would be the most suitable?

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Wed 7th Oct 2020 |
| Last Modified: | N/A |
| QID\#: | $24,119,243$ |

Correctly answered feedback
Material E. As it blocks all of the light, it means that it is opaque. When a material is opaque it means that it is not see-through, making it a good choice when privacy is needed

Incorrectly answered feedback
Material E. As it blocks all of the light, it means that it is opaque. When a material is opaque it
means that it is not see-through, making it a good choice when privacy is needed

## 

## Question 38

## Study the flow chart below.


(a) Based on the flow chart, state two properties of B.
$\qquad$
$\qquad$
(b) Which state of matter is C in?
$\qquad$
(c) Give an example of A.
$\qquad$
(d) Based on the flow chart, state one difference between B and D. [1]

Question Type: Essay
Date Added: Wed 7th Oct 2020
Last Modified:
N/A
QID\#:

Correctly answered feedback
a) B has mass but does not have a definite volume.
b) $\mathbf{C}$ is in the liquid state.
c) A can be sound (or non-matter)
d) D has a definite volume but $B$ does not.

Incorrectly answered feedback
a) B has mass but does not have a definite volume.
b) $\mathbf{C}$ is in the liquid state.
c) A can be sound (or non-matter)
d) D has a definite volume but B does not.

## Question 39

Benson lives in a very hot part of the world where the temperature at noon can easily reached $35^{\circ} \mathrm{C}$. As a result, it is very common to see cracks on the concrete ground because of the heat from the sun as shown in the diagram below.


Explain how would the heat from the sun cause the cracks on the ground to be formed?

Correctly answered feedback
a) As the heat caused the concrete ground to expand, there was no . more space for the ground so it cracked.

Incorrectly answered feedback
a) As the heat caused the concrete ground to expand, there was no . more space for the ground so it cracked.

Question 40

Benson's father instructed him to fit a metal rim tightly around the wheels to protect the wheels from being damaged by the uneven ground, as shown in the diagram below.


Before filling the rim round the bullock-cart whee!

However, the metal rim was not big enough to be fitted around the wheels at room temperature. His father suggested two steps to complete the task.
(b) Using only a bunsen bumer, describé what shouid Benson do to fit the metal rim tightly round the bullock-cart wheels?

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Wed 7th Oct 2020 |
| Last Modified: | N/A |
| QID\#: | $24,119,285$ |

Correctly answered feedback
b) Benson should use the Bunsen burner to heat up the metal rim. Heat will cause the metal rim to expand so that the bullock-cart wheel is able to fit into the metal rim. After which, he has to let the metal rim cool off by removing it from heat. The metal rim will then contract back and fit tightly around the bullock-cart wheel.

Incorrectly answered feedback
b) Benson should use the Bunsen burner to heat up the metal rim. Heat will cause the metal rim to expand so that the bullock-cart wheel is able to fit into the metal rim. After which, he has to let the metal rim cool off by removing it from heat. The metal rim will then contract back and fit tightly around the bullock-cart wheel.

## Question 41

Thomas conducted an experiment using the set-up below.


He measured the temperature of liquid K in the container made of material W over a period of time. He repeated the experiment using a container made of material X. His results are shown in the graph below.

(a) State one variabla in this experiment that must be kept the same to ensure a fair test.
(b) If Thomas wanted to bring cold drinks for a school trip, which material should he use for the container to keep his cold drinks cold for a longer period of time? Explain your answer.
$\qquad$

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Wed 7th Oct 2020 |
| Last Modified: | N/A |
| QID\#: | $24,119,320$ |

Correctly answered feedback
a) There must be the same amount of liquid.
b) Material W. Liquid K in the container made of material $\mathbf{W}$ gained heat slower from the hot water. Hence, material $W$ is a poor conductor of heat. It means that the cold drinks stored in a container made of material W will be kept cold for longer since the container will gain heat over a longer period of time.

## Incorrectly answered feedback

a) There must be the same amount of liquid.
b) Material W. Liquid K in the container made of material W gained heat slower from the hot water. Hence, material $W$ is a poor conductor of heat. It means that the cold drinks stored in a container made of material W will be kept cold for longer since the container will gain heat over a longer period of time.

## Question 42

Thomas managed to find a material $Y$ that is able to keep cold drinks cold for an even longer perlod of time. Which one of the lines in the graph below, A or B , correctly shows how the temperature of llquid K in a container made of material $Y$ would change over time?

A) A
B) B

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Wed 7th Oct 2020 |
| Last Modified: | N/A |
| QID\#: | $24,119,333$ |

## Question 43

The diagram below shows an umbrella.


What material should part $F$ be made of?
[1]

Accepted answers:
plastic

Question Type: Free Text
Date Added: Wed 7th Oct 2020
Last Modified: N/A
QID\#: $\quad 24,119,351$

## $«^{\pi}$ Answers | Edit | Co Duplicate | 4 Used In | 合 Reorder

## Question 44

(b) Complate the table below to show how two properties of the material stated in part (a) make an umbrella usetul in difforent conditions.

|  | Conditions | Property |
| :---: | :---: | :---: |
| 1. | Sunny day |  |
| 2. | Rainy day |  |

(c) Part G of the unbrella is usually made of metal. Explain why metal is used to make part G instead of plastic.

Correctly answered feedback
b)

|  | Conditions | Property |
| :---: | :---: | :---: |
| 1. | Sunny day | Shady, can block out heat <br> and sunlight. |
| 2. | Rainy day | Waterproof, can prevent a <br> person from getting wet. |

. c) Metal is stronger than plastic.

Incorrectly answered feedback
b)

|  | Conditions | Property |
| :---: | :---: | :---: |
| 1. | Sunny day | Shady, can block out heat <br> and sunlight. |
| 2. | Rainy day | Waterproof, can prevent a <br> person from getting wet. |

. c) Metal is stronger than plastic.

## Question 45

During a science lesson, Kendrick was given two rods and was told to make them into electromagnets. He created the set-up as shown below.


Name a material that can be used to make an electromagnet.

Accepted answers:
$\checkmark$ Nickel
$\checkmark$ Cobalt
$\checkmark$ Iron

Question Type: Free Text
Date Added: Wed 7th Oct 2020
Last Modified: N/A
QID\#: 24,119,394

## $\mathbf{*}^{\wedge}$ Answers | Edit | Equplicate | 4 Used In | $\stackrel{\rightharpoonup}{\text { R Reorder }}$

Question 46

Kendrick wanted rod 2 to have a greater magnetic strength than rod 1.
(b) State cone change that Kendrick can make to the set-up shown above in order for rod 2 to have a greater magnotic strength

Kendrick was then given a third rod and was asked to bring all three rods near a dish containing similar paper clips. The number of paper clips attracted by each rod were recorded in the table below.

| Rod | Number of paper clips attracted |
| :---: | :---: |
| 1 | 5 |
| 2 | 8 |
| 3 | 0 |

(c) Give a possible reason why no paper clips was attracted by rod 3. [1]

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Wed 7th Oct 2020 |
| Last Modified: | N/A |
| QID\#: | $24,119,413$ |

Correctly answered feedback
b) Kendrick can coil rod 2 a greater number of times.
ic) Rod 3 cannot be an electromagnet / could not be magnetized.
b) Kendrick can coil rod 2 a greater number of times.
ic) Rod 3 cannot be an electromagnet / could not be magnetized.

## Question 47

- Study the classification chart below.


Based on the chart above, state the characteristics of plants B and D.
Plant B: $\qquad$
Plant D: $\qquad$

Question Type: Essay
Date Added: Wed 7th Oct 2020
Last Modified: N/A
QID\#: $\quad 24,119,429$

Correctly answered feedback
| Plast B: Plant B is a flowering plant which lives in water.
Plant D: Plant D is a non-flowering plant which also lives in water.

Incorrectly answered feedback
| Plast B: Plant B is a flowering plant which lives in water.
Plant D: Plant D is a non-flowering plant which also lives in water.

Based on the chart above, which group, A, B, C and D, would you classify the following plants?

| Plant | Group |
| :---: | :---: |
| Roses |  |
| Ress |  |

(A) A
B) $B$
C) C
D) $D$

## Question Type:

## Multiple Choice

Randomize Answers: No
Date Added:
Wed 7th Oct 2020
Last Modified:
QID\#:
N/A
24,119,446

## $\boldsymbol{k}^{\boldsymbol{x}}$ Answers | Edit | Ep Duplicate | 1 Used In | 合 Reorder

Question 49

A) A
B) $B$
C) C
D) $D$

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Wed 7th Oct 2020 |
| Last Modified: | N/A |
| QID\#: | $24,119,455$ |

The pictures below show two animals, $X$ and $Y$,


Animal $X$


Animal $Y$

State the animal group that animal $X$ belong to.
Animal X : $\qquad$ -

## Accepted answers:

$\checkmark$ mammals

Question Type: Free Text
Date Added: Wed 7th Oct 2020
Last Modified: N/A
QID\#: $\quad 24,119,471$


#### Abstract

$*^{\star}$ Answers | Edit | Duplicate | $\uparrow$ Used In | $\stackrel{\rightharpoonup}{\text { Reorder }}$


Question 51
(b) Based only on what you can observe from the pictures above, state one difference between animal $X$ and animal $Y$. (Do not compare their body shape, size and colour.)
$\qquad$
(c) How do animal $X$ and animal $Y$ reproduce?

Animal X: $\qquad$
Animal $Y$ : $\qquad$

Question Type: Essay
Date Added: Wed 7th Oct 2020

Last Modified: N/A
QID\#: 24,119,482

## Correctly answered feedback

b) Animal $Y$ has scales while Animal $X$ has hair.
c) Animal $X$ : Give birth to live young

## Animal Y: Lays eggs

Incorrectly answered feedback
b) Animal Y has scales while Animal $X$ has hair.
c) Animal X: Give birth to live young

## Animal Y: Lays eggs


[^0]:    $*^{\star}$ Answers Edit E Duplicate | 4 Used In | $\stackrel{\rightharpoonup}{\text { Reorder }}$

[^1]:    

